CALWEA COMMENTS
Submitted online, September 12, 2023

Submit comment on Straw proposal

Initiative: Generation deliverability methodology review

1. Please provide a summary of your organization's comments on the Generation Deliverability Methodology Review stakeholder call. *

CalWEA greatly appreciates CAISO's thoughtful consideration of stakeholders' input on these arcane, but critically important, issues and its willingness to propose meaningful reforms in several areas. These reforms could enable a significant number of projects to accelerate their grid interconnections and help load-serving entities meet their near-term reliability and clean-energy requirements while enhancing competition and thus reducing costs.

CalWEA remains concerned, however, that the stakeholder call did not allow sufficient time to discuss some of the fundamental issues raised in the Joint Proposed Framework for Discussion, submitted on June 22, 2023, by CalWEA, BAMx and CESA. Further reforms could far more substantially promote cost, reliability, and other public policy goals. CalWEA raises some of these issues in these comments.

2. Provide a summary of your organization's comments on the proposed removal of secondary system need from generation interconnection deliverability studies, as described in the straw proposal.

CalWEA appreciates and supports CAISO's proposal to eliminate the Secondary System Need ("SSN") test from the deliverability studies. As stated in the Joint Proposed Framework, the SSN test focuses mainly on the local curtailment of supply resources, which does not translate to a lack of system reliability due to capacity shortage (which is the main purpose of CAISO's deliverability test studies for the purpose of RA capacity eligibility). Therefore, it is appropriate that CAISO join PJM and MISO in using only one test, equivalent to HSN, aimed at the high system need period when testing for generation capacity designation for RA.

We also agree with CAISO, however, that the elimination of the SSN test is justified on reliability grounds because, while "resource shortage conditions do occur during the SSN study period" (hours ending 15 to 18), the CAISO's Summer Assessment studies show a "decreasing risk of resource shortages during the SSN study period." CalWEA notes that CAISO at one time included HE 18 in the High System Need (HSN) window but moved that hour into the SSN window in 2022. CalWEA believes that HE 18 belongs in the HSN window and, in that case, the SSN window would be shown to be even less risky.

3. Provide a summary of your organization's comments on maintaining the methodology for determining dispatch levels, as described in the straw proposal.

First, the Straw Proposal appears to minimize the dispatch level issue as being one "primarily associated with wind generation study values due to the characteristics of the wind resources." This

argument only becomes true once the SSN test is eliminated; otherwise, solar projects would also be greatly and inappropriately impacted from a severe over-representation of resource capacity. Moreover, while it is true that the greatest disparity between the CPUC's QC values and the CAISO's arbitrary exceedance levels (used as CAISO's dispatch assumption) exists for wind resources in the HSN period, the impacts are felt by all other types of resource capacity seeking access to the grid and therefore bears on the cost-effective achievement of the state's clean energy goals. For example, if CAISO plans for offshore wind at an 83% exceedance level (as CAISO is planning to assume in its 20-year Transmission Outlook for HSN hours), rather than its ELCC value (currently estimated at approximately 50%), offshore wind will require many gigawatts of Transmission Planning Deliverability (TPD) capacity that would otherwise be available for storage resources that would help integrate that wind and other variable energy resources by absorbing production above QC levels and dispatching when the system needs it and VER production is below QC levels.

Second, CAISO's response to using the CPUC's QC values as the dispatch assumption for wind is completely centered around curtailment concerns (using CalWEA's simple two-bus conceptual example as if it were a proxy for the complex grid). Here again, however, if transmission capacity is not reserved above QC levels, that capacity will be available for storage resources that will help to integrate wind.

Nevertheless, we are encouraged that the Straw Proposal indicates that CAISO will "continue to monitor the CPUC's development of NQC values and evaluate the need for further updates to its deliverability methodology." We note that CPUC staff have already issued preliminary 24-hourly values and we encourage CAISO to begin contemplating how it will use these values in its dispatch assumptions. For example, for each resource, CAISO could use the highest hourly QC value in the HSN window as its dispatch value.

4. Provide a summary of your organization's comments on the proposed increase to 10% DFAX threshold for 500 kV line overload constraints, as described in the straw proposal.

CalWEA strongly supports and appreciates the proposal to raise the 5% DFAX threshold for 500 kV line overload constraints to 10%. We also encourage CAISO to consider extending the 10% threshold to 500/230 kV transformers if the constraint is from the transformer's high to low side.

5. Provide a summary of your organization's comments on the proposed changes to treatment of n-2 studies and mitigation requirements, as described in the straw proposal.

CAISO continues to incorrectly link its deliverability studies to various NERC/WECC requirements and to use that linkage to justify studying P7.1 contingencies (N-2 outages of double-circuit towers).[1] A strong indication that there is no such linkage is the fact that CAISO has previously narrowed the scope of N-2 outages that it considers in its deliverability studies and now studies only P7.1 contingencies. While NERC/WECC require all credible N-2 contingencies to be studied as part of reliability studies performed in the interconnection process, there are no such requirements for deliverability studies. As the Joint Framework Proponents explained in footnote 3 of their June 22,

[1] From p. 15 of the Straw Proposal: "The ISO on-peak deliverability assessment methodology currently includes n-1 and n-2 contingencies. NERC Reliability Standard FAC 002, Facility Interconnection Studies, is an applicable reliability standard for generation interconnection studies. It requires steady-state, short-circuit, and dynamics studies as necessary to evaluate system performance under both normal and contingency conditions in accordance with Reliability Standard TPL-001. NERC Reliability Standard TPL-001 requires common mode n-2 contingency analysis."

2023, comments: "The TPL requirements are not mandated to be met via a generation deliverability assessment process, and CAISO already ensures those are met as part of the [Transmission Planning Process (TPP)] and [Generation Interconnection Process]."
CAISO also expresses concern that "discontinuation of the n-2 contingency studies [in the deliverability test] would lead to sub-optimal results that would need to be addressed and resolved – albeit less effectively and less timely – in the [TPP]." On the stakeholder call, CAISO indicated that the deliverability study should drive transmission needs so that the transmission requirements of a project do not get ignored in the procurement process and that addressing those needs in the TPP would be reactionary. These concerns are misplaced.

First, the N-2 criterion that CAISO currently applies in its deliverability test is extraordinarily conservative and triggers a need for upgrades that would not be triggered in TPP studies, resulting in the unreasonable denial of the full capacity deliverability (FCD) status required for RA eligibility. The P7.1 criterion in the deliverability methodology tests a resource under an N-2 condition that applies to that resource, which by itself is an extreme assumption, but, in practice, effectively applies to a combination of RA resources at once, which collectively have passed hundreds of different and simultaneous N-2 deliverability tests at various grid locations – an inconceivable circumstance that would never be considered in reliability studies.

Second, reliability upgrades should be separately addressed in the reliability portion of interconnection studies, which are subject to NERC standards. If CAISO is concerned that insufficient reliability upgrades will be identified there, additional reliability test scenarios could be added to the generation interconnection study process.

For all these reasons – and the major reliability, environmental, and ratepayer benefits that relaxing the deliverability methodology would bring, CalWEA continues to encourage CAISO to eliminate the N-2 criterion from the deliverability study. Alternatively, as a compromise, CAISO could adopt, across the board, the much lower N-2 standard being proposed under its "conditional deliverability" proposal as discussed in response to question 7 below.

CalWEA underscores that our proposed reforms are intended only for CAISO's resource deliverability test studies in GIDAP and are not intended to question CAISO's deliverability study methodology and assumptions used in the TPP process.

6. Provide a summary of your organization's comments on revising the ADNU/LDNU Guidelines, as described in the straw proposal.

CalWEA supports eliminating the Area Constraint guideline ADC-C4. The cost threshold for projects that qualify for ADNUs under ADC-C4 should be raised to at least $50 million, which is already covered by ADC-C3; therefore, ADC-C4 is unnecessary. This change will enable developers to have more control over less-expensive upgrades that are needed to achieve deliverability status. We note, however, that eliminating or relaxing the N-2 criterion in deliverability studies will result in many fewer ADNU and LDNU upgrades.

7. Provide a summary of your organization's comments on the proposed conditional deliverability based [on] original schedules during delayed deliverability upgrades, as described in the straw proposal.

The CAISO's "conditional deliverability" ("CD") proposal is a significant step in the right direction, particularly because it implicitly acknowledges that there are no applicable NERC standards for the deliverability portion of the GIDAP studies, contrary to statements in the Straw Proposal such as that

referenced in question 5, above. Under its CD proposal, CAISO proposes to apply reliability standards less stringent than the P7.1 test that is currently applied for any form of deliverability capacity designation. For CD, CAISO proposes to screen only for cascading P7.1 outages, effectively a far less extreme (but still very rare) condition, that will involve significantly fewer cases where consideration of N-2 outages would prevent a resource from attaining deliverability status. CalWEA anticipates that several GWs of generation capacity could qualify for CD based on this proposed criterion, depending on implementation details.

However, CAISO's proposal is inconsistent with FERC policy and requires further clarification.

Inconsistency with FERC Policy

The CD proposal is flawed because it has no basis in fact and is discriminatory. FERC requires non-discriminatory access to the transmission system. The CD proposal would apply only to a subset of resources that cannot achieve FCD status due to delayed transmission projects that will remedy the assumed N-2 conditions in the generally applicable deliverability test study. For these resources, CAISO is considering relaxing an assumed system condition in the study and, if the test is passed, effectively grant FCD status to these resources. While CAISO states that this is a "risk-based approach," it has not provided any factual basis that supports application of a relaxed assumption only for a subset of resources. In the Straw Proposal, CAISO cited Wellhead Electric's comment that discussions in CAISO's Transmission Development Forum make clear that network upgrade timelines are being delayed up to eight years or more. This is nearly the entire 10 years that it takes to plan and construct a new transmission line. CAISO has not explained why using a relaxed deliverability test ensures sufficient system reliability for up to eight years, but not for 10 years or more, for any amount of capacity or duration, let alone the substantial amount of capacity that would qualify for CD for as long as eight years. Thus, CAISO's proposed CD policy would be discriminatory towards other resources that could achieve FCD status based on the same relaxed deliverability test.

As the Joint Framework Proponents noted (p. 3), neither MISO nor PJM uses any N-2 contingency scenario in its deliverability test studies intended to designate RA capacity for resources requesting such designation. CalWEA and the Joint Framework Proponents have explained that the purpose of the deliverability test is to qualify resources for the CPUC's and other Local Regulatory Authorities' Resource Adequacy (RA) programs by ensuring their reasonable availability to serve system load under stressed, but not unreasonably extreme, system conditions. (In discussing dispatch levels, the CAISO "agrees that stressed but not extreme conditions should be assumed in the deliverability test studies.") The purpose is not to address system reliability directly, which must be, and is, addressed by the RA programs, the CAISO's TPP, and the reliability studies performed in the generation interconnection process.

Moreover, the CAISO tariff (including sub-tariff policies supporting the tariff) must be just, reasonable, and in the public interest. CAISO grounds its CD policy not in reliability criteria, but because (at p. 20) "the ISO understands the disruptions resulting from delayed PTO timelines for deliverability upgrades" and "understands that [such] delays … can sometimes result in resource development owners missing deadlines under their power purchase agreements (PPA). This can also result in the PPA counterparty not meeting RA requirements, forcing it to procure a different alternative resource at higher costs." CalWEA has advocated broader reforms to the deliverability

methodology on the same basis of promoting achievement of the state's reliability goals and reducing compliance costs, and to further the state's SB 100 greenhouse gas goals.[2]

Accordingly, CAISO should modify its N-2 deliverability criterion across the board, rather than only for a subset of resources.

The CD Proposal Requires Clarification

CAISO proposes to apply its CD policy to resources that have been delayed in obtaining deliverability status because transmission projects have been delayed, as verified by CAISO. On the stakeholder call, in response to a stakeholder question, CAISO stated that this policy would apply to queue cluster 14 (C14), C15, and later queue clusters. CalWEA requests clarification regarding how CAISO intends to apply the proposed CD policy.

CalWEA interprets CAISO's proposal and statements to mean that CAISO would not generally apply the relaxed deliverability test in each interconnection study process. (If it did, it would result in substantially more TPD capacity becoming available from the existing system as well as recently approved TPP transmission upgrades for allocation.) Instead, CAISO would apply the current, highly restrictive deliverability test, leading to a much smaller amount of TPD capacity available to allocate among projects based on expected transmission construction schedules at that time. It would then provide CD status only if/when those schedules become delayed during the development period of the transmission upgrade. (To reiterate the point above, this is an arbitrary, non-reliability-based circumstance.)

Additionally, CalWEA requests that CAISO provide implementation details on the following topics:

- Developers will need to be informed as to whether their FCD status is being held up due to an N-2 condition (which would be resolved by CD) and/or an N-1 condition (which would not). Developers will need to have this information as soon as possible to inform contract negotiations.
- Will CD be a new product (akin to FCD and PCD)? If it is, it will require a tariff change, which would diminish the purpose of the new policy, which is to bring projects online more quickly. (A change in the deliverability methodology would not require a tariff change.)

[2] For example, in CalWEA's January 4, 2023, comments in this initiative, we stated: "CalWEA is concerned that the CAISO's deliverability assessment methodology is unnecessarily conservative, … Without a solution to this issue, California's mid-term reliability and clean energy goals are in jeopardy. Stated another way, these resources will be needed to meet the state's dual reliability and clean-energy goals. At a minimum, if a substantial number of resources are able to attain deliverability status due to reforms implemented by the CAISO, these resources will help to create a competitive market as LSEs seek to meet their substantial mid-term reliability targets."